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ORIGINAL AND SELECTED ARTICLES.

VIBURNUM PRUNIFOLIUM UNRELIABLE IN ABORTION—A REJOINDER.

BY A. G. SMYTHE, M. D., OF MISSISSIPPI.

GENTLEMEN—I ask space for some remarks in reply to Dr. Thomas F. Houston's article in your last issue. The Doctor's very confident expressions as to the virtues of viburnum prunifolium, though doubtless honestly made on his part, do not convince me of any error in my views, or set aside the facts and experiments upon which they were based. And as to doctors disagreeing, that is a thing of daily occurrence in all the departments of science.

Medicine is not an exact science, and cannot be demonstrated by a mathematical elucidation, and until a better method of arriving at correct conclusions than any now known to the medical men, there will be continual differences of opinion and conclusions, in all of its departments.

In my article in the December number of the RECORD, there was no wish or intention to invite a discussion upon the merits of the remedy in question. (There is nothing to discuss.) The desire was simply to warn the confiding members of the profession to avoid the rocks, shoals and quicksands upon which I have so often been wrecked. *Badinage aside.* The virtues of the remedy

were sounded through the literature of the day, and so far as I am informed, without question or contradiction, and from my unfortunate experience, I could not permit it to pass any longer without giving the professional public my observations. It was in no prurient desire to appear in public; but after repeated postponings that it was done. The first suggestion was to ask its appearance in the columns of the *Therapeutic Gazette.* But upon reflection concluded that as that journal was principally devoted to the advocacy of new remedies and new preparations, that it might not appear to be compatible with its objects and interests. It was then suggested to offer it to one of my favorites, THE SOUTHERN MEDICAL RECORD. I am happy to note the spirit of generous fairness manifested by the *Therapeutic Gazette* in copying the article in the February number.

I regret exceedingly that it was my misfortune to meet with such a signal disappointment in the trial of the remedy, if remedy it is. In the first place, to fail to treat that or any other case successfully. In the second place, to fail to find a new and reliable remedy. In the third place, to be forced to differ with my personal and professional friends and brethren; all of which is very unpleasant and unprofitable, to say the least.

I am charged with not having given it a FAIR TRIAL. Ten pages of notes of cases could be given. When making trials and testing remedies, I do not come to hasty and inconsiderate conclusions. Various forms and doses were given to different patients, at different times. In the outset of trials of the remedy, I had several subjects who were habitual abortionists, and flattered myself that I would now have no more cause to mourn over failure and disappointments. In a general way I am not sanguine of success; but for once I was carried away with the hope that now I had the remedy of remedies in this, to me, troublesome derangement. Trial after trial (FAIR TRIALS) upon the same and upon different patients were made. And I reiterate it, that in no case when it was relied upon, did it succeed. Some of the cases became dissatisfied and discharged me, others continued. I abandoned its use, as before said, in disappointment, mortification and disgrace. The latter of which I have not recovered from yet. I have adopted a different treatment with different remedies with as good success as could be hoped for in any treatment now known. Having overcome the disposition to miscarry in all the cases who continued under my treatment, all having had more or less children, and have no chronic or habitual cases of abortion or miscarriage at present.

I may be mistaken, but yet think that much, if not all the credit attributed to this much vaunted and highly extolled remedy, is due to the adjuvants and other means used in the treatment of threatened abortions. All of us are, more or less, anxious to give relief as soon as possible; and are, more than likely, in urgent cases, to give more than one remedy, unless the one given relieves the trouble immediately, and more especially is it the case if the remedy is new or uncertain in its action. I am free to admit that such is the habit with myself, unless it is when making a direct experiment, as was the case in the trials I made with viburnum prunifolium. In no case do I recommend the use of any remedy—either new or old—in any new or special way, without giving it numerous, fair and independent trials. True, I may report its use in a single or in a few cases. May and have suggested remedies which I never used, or even ever heard of being used. But in no case urge and recommend the use of an article for the reason that in one or a few cases it appears to do well. There are a number of articles in our Materia Medica that I think are good remedies, which will not do to rely upon implicitly.

In a few cases of chronic diarrhœa I have had the most happy effects from the use of the fluid extract of guarana, yet in other cases it has failed. An untold number of similar instances might be cited.

In replying to the article of Dr. Houston, there was no argument or reason to give for the dogmatic assertion that viburnum prunifolium had failed as a remedy in threatened abortion—a mere relation of what had, and what had not taken place. I have now given the only reason for making it public; and trust that the profession, and especially the readers of this Journal, will pardon the first article, and accept this in explanation, and as an apology for occupying the space in the RECORD, and their time in reading the same.

MOVEMENT AS A MEANS OF CURE.

A natural outcome of the teachings of the expectant school of therapeutics, is the placing of rest in a high position among the means of cure. Granted that nature is able, unassisted by art, to restore the equilibrium between her parts which has been disturbed by the foreign element, disease, and it follows that all means designed to secure non-interference with the free play of nature's forces, are all essential. To deny that rest has no value in therapeusis would be practically equivalent to a denial of nature's power to heal, and the skeptics on this question have long since succumbed to nature's power to destroy. Nature is powerful but not

omnipotent in the domain of therapeutics, and rest is a valuable but not an invaluable means of universal applicability. The dangers of hobbyism and extremism (empiricism) in the matter of application of rest have too many living illustrations, particularly in surgical practice, while very many more of its results are embowelled in mother earth. There is danger in all extremes, and the doctrine of rest, heralded though it has been by so many prophets and bards, has been no exception to this rule. Its danger has lain in its irrational application—the improper selection of cases, and its too prolonged continuance in cases in which it was at first indicated.

The antithesis of rest is movement, and as an offset to the pernicious results of rest the inculcation of the benefits of movement as a therapeutic agent would seem to be called for. The scientific lines between the necessity for the two are, it may be, difficult to trace, but the highest degree of success lies near those lines, and efforts to locate them should be unceasing. When has the inflamed joint or fractured limb been kept immobile just long enough, the inflamed peritoneum just long enough rested, the inflamed lung just long enough kept in an "opium splint?" These are questions on whose proper answer in individual cases successful therapusis largely hinges. In all cases which originally demanded rest there comes a time when rest must give way to motion. When is that time? is a question for the medical attendant to answer. Under enforced rest of the inflamed joint the effused synovial fluid has become absorbed and the symptoms of inflammation have disappeared; here is then the critical point. Shall the joint be longer kept at rest, as is the common practice, lest the possible dying embers be fanned into new life, or shall passive movement be practiced? Each individual case presents circumstances which must modify the decision as to such procedure, and it is in trimming sail to meet these circumstances that the skill of the medical attendant is displaced. That anchylosis on the one hand from too prolonged rest, and a renewal of inflammation from an insufficient continuation of such rest, are the Scilla and Charybdis in the treatment of joint affections, is attested by abundance of experience. The too cautious physician, by attempting to steer clear of one, allows the bark to be caught in the other, and it is to be feared that anchylosis as a result of too much rest is a too frequent result of treatment.

The necessity for movement, in the treatment of a diseased joint, having been determined on, the method of its performance becomes the practical question. In an article in the British Medical Journal, over a year ago, Dr. John Spender ably discussed this branch of the subject. He refers to a discussion of the subject, some years ago, by the late Mr. Hutton. Summed up in a few words, Mr. Hutton's principle was the rupture of adhesions by manipulative force, guided by skillful leverage. We learned from him that joints will bear much rougher usage than is sanctioned by professional usage.

In dealing with a joint which has not been materially damaged by inflammation, is not much enlarged, but is now weak mainly

because the muscles are weak which ought to move it, a thorough and scientific shampooing (or massage) is our therapeutic watch-word. The physiology of the joint has to be studied more than its anatomy. The joint is afraid of itself because it is not used; its volitional energies are "hidden under a bushel;" and the owner of it has, perhaps, been scared by the terror of what may happen if he presumed to walk even with the help of crutches. It is satisfactory to know that Dr. Sayre, who is the designer of such an ingenious plan for supporting and resting a diseased spine, distinctly says that, in the case of anchylosed limbs, there is "a time for motion as well as a time for rest."

First, then, we satisfy ourselves that the joint-ends of two bones are not mortared together, and do not require any forcible methods for their separation. A patient may be put partially under the influence of chloroform if necessary, and the capability of a joint to be bent or extended will then be fairly tested, and we shall discover what checks there are to healthy movement. The passive play of a joint tells us that its mechanism is sound; but the question is: What are its vital activities? What can the patient do with it, and how far can he use it?

The simple plan of treatment which Dr. Spender has for years adopted is as follows: Imagine the knee to be the affected joint, and the foot should rest on a stool or block of wood just within a large shallow open bath, so that the knee is over nearly the centre of the bath. A jug, holding about a pint of fluid, is filled with tepid water, and is turned upside down about three feet above the knee, so that the water falls with a splash on the joint; and this is repeated from six to twelve times. An attendant, sitting in front of the patient, then plants a hand on each side of the knee; and, with the thumbs meeting in front, the hands should be moved firmly up and down for eight or ten minutes. The pressure used should be equal and well sustained, not causing any uneasiness, not in the least rough, but such an union of firmness and gentleness as a practical manipulator will easily understand. The thumbs, while agents of modern pressure themselves, may be made the fulcra for pressing and rubbing the back of the joint. At the end of the shampooing process, the whole joint ought to be dry and warm, and to be immediately wrapped in a covering of oiled silk lined with wadding, which should be securely fastened and held on for some hours.

By this easy plan, carried out regularly once or twice a day for several weeks, there is seldom any difficulty in restoring the torpid functions of non-anchlyosed joints. Now and then it may be desirable to suspend the friction for two or three days, if the skin shows signs of irritation; and in warm weather the impervious pad is scarcely necessary, and might cause an eruption of pustular acne. Medicated lotions or liniments are rarely prescribed; but now and then Dr. Spender introduces under the oiled skin wrap a piece of folded flannel soaked in a mixture of iodine (half an ounce), and soft water (seven ounces). The early douchings are best done with tepid water; but this should be exchanged for cold water as soon as possible, on account of the great glow and reac-

tion which are afterwards obtained; and during the summer months, cold water may be used from the first. In all cases, the local treatment should be supplemented by regular passive movements carefully and coaxingly executed, and never exciting pain and fatigue. Sometimes it is only timidity which hinders a patient from (say) pronating and supinating a hand, or flexing and extending an elbow; a group of muscles have to be taught anew. As the lower limbs bear the weight of the body, their voluntary exercise must be deferred until the patient regains confidence and acquires strength.

The next stage of treatment consists in the application of uniform and gentle support. A weak joint requires support when it no longer requires rest. This seems to be the key of the new and important device of the American surgeons—prolonged pressure without prolonged rest. The principle is not at all new. And yet it ought to have been clear that to lay up a limb in idleness admits of the healing of an ulcer by a degree of vital action, which is unable to maintain the permanence of that healing when the limb is restored to use. Similarly, when we have to treat a weak joint, the principle ought to flash upon us with unerring instinct; here is a case, we should say, for applying firm pressure and allowing moderate exercise. For the ankle, there is nothing better than an India-rubber bandage, put on from the base of the toes to the upper part of the leg. The bandage is far better than a so-called elastic anklet, because it supports all the muscles which move the ankle, it should make a gentle uniform pressure, without any sensatiou of squeezing, each fold slightly overlaping the previous one all the way up the limb. The knee should be enclosed during the daytime in an elastic support, which should always be laced. The lacing allows the degree of support to be varied, according to the feelings of the patient and the amount of exercise he has to undergo. Equipped with this simple apparatus, the lower limb enjoys, as far as the upper part of the knee, a gentle and uniform pressure, which permits useful locommotion within restraining and salutary conditions.

The application of this principle to the upper limb is not difficult. A hand and wrist, when embraced by an elastic glove extending a little way up the arm, is competent to perform various feats of dextrous workmanship, which would otherwise soon cause aching and powerlessness. But what need is there for illustrating further such an obvious point of practice? If to be at work is the part which a healthy organ has to play, it is clear that too much rest cannot contribute to the perfection of that work, either in quantity or quality. That special condition which is called the "hysterical joint" is peculiarly amenable to the vigorous and helpful treatment of douching and pressure. For the douching, the use of the bath waters is much to be commended, as the dynamic stimulus of their heat maintains an after glow, which is a sign of more vital energy. And hysteria, if it mean anything, means a lack of this energy—a crippled volition, a sluggish blood stream, and a general under tone of life. The combination of firm pressure and moderate exercise fulfils, in this case,

exactly what we ought to aim at: support to the mechanical apparatus of locommotion, and arousing and sustaining of vital function.

Rest and movement are, therefore, complementary to each other, both in physiology and in therapeusis. The analogy is as close as possible. Alternation of work and rest is the law of the human organism in health, and health could not be preserved without it. Disease may call for a prolongation of the element of rest; but it is a note of clinical insight to discover when the disease ends, or when sufficient health returns to justify the usual alternate rest and work. Continued work without rest could not be; rest continued too long is not only conceivable, but it is one of the present dangers to therapeutic surgery.—*Therapeutic Gazette.*

TREATMENT OF COMPOUND FRACTURES AND WOUNDS OF JOINTS BY GLYCERINE AND CARBOLIC ACID.

BY F. C. G. GRIFFIN, A. M., M. B. OXON., M. R. C. S., ENG.,
Surgeon to the Weymouth Royal Hospital.

As various modes of antiseptic treatment continue to be brought forward, and the most opposite opinions are still held as to their merits, I have thought an account of a few cases that I have treated with the glycerinum acidi carbolici of the British Pharmacopœia, without antiseptic spray or any very elaborate precautions, would be of general interest. And although the number of cases is not large, still the fact that they have all got well has produced a strong impression on my mind of the value of the mode of treatment.

A pipe manufacturer, of intemperate habits, who had failed in business and taken to fishing, was engaged in hauling in a net, with others, after dark, when he got his leg caught by a loop of rope and was thrown down, and found himself unable to ri e. The fishermen carried him home, but handled him rather roughly, as they thought he was not seriously hurt. When I saw him I found he had sustained a compound fracture of the tibia, at the junction of the lower and middle thirds, and had lost a large quantity of blood from a small wound caused by the upper fragment of the tibia having been driven through the skin. I bound it up temporarily, to arrest the bleeding. After about twelve hours, when the bleeding had at length quite stopped, the temporary dressing was removed, and a pad of lint soaked in collodion applied. This pad remained on for two days, when it became partly detached, and free oozing of bloody fluid commenced from the wound. I now applied a pad of four thicknesses of lint saturated with glycerinum acidi carbolici to the wound, and a few turns of bandage over it, so as to keep it in its proper position. The lint became firmly adherent to the wound, and the next day I applied a larger pad of four thicknesses of lint soaked in the same way over the original pad, so as to keep it still saturated.

On the third day afterward I cut the edges of the two outer

layers of the pad next to the wound, and removed and soaked them with glycerinum acidi carbolici, and then re-applied them, and then the bandage as before. I will here state that I regard it as of much importance to the success of this plan of treatment not to disturb the layers of lint immediately covering and generally attached to the wound. After this treatment had been continued about ten days, a large blister containing dark fluid formed under the pads and showed at their edges. I now cautiously tried whether the under pad was still adherent, and finding it was not, I removed it and found that the wound had healed. I left the blister exposed to the air, and it dried up in a few days. The remaining progress of the case in no way differed from that of one of simple fracture, and the man ultimately completely recovered.

I was informed by this man's wife that previous to the accident he lived almost entirely on beer, and took scarcely any solid food except a little bread, and that if she provided him with a good dinner he used to sell or exchange it for more beer. While he was under my treatment I limited him to a pint of stout daily.

The next patient treated in this way was a boy of about ten years of age, with compound fracture of the tibia, the upper fragment of the bone having been driven through the skin. The glycerinum acidi carbolici was applied on four thicknesses of lint about two hours after the accident, and covered with cotton-wool, and fresh glycerine and acid was applied to the lint daily, without disturbing the layers next to the wound. After about ten days the lint was removed, and the wound found to have healed. A speedy recovery followed. The fracture apparatus used was of the same kind as in the following case.

The next patient was a tradesman who had jumped out of a cart while his horse was running away. He, in consequence, received a simple fracture of the fibula, and a compound dislocation of the foot outward, the lower extremity of the tibia being driven through the skin, the sock, and the elastic of his boot against the ground, and the internal malleolus broken off. When he had been conveyed home the bone was still protruding, and the wound could not be got at until his boot and sock had been cut away. The bone, being covered with dirt from the road, was now carefully cleansed, and with the aid of two other surgeons, who had been sent for at the same time as myself, and arrived soon after, an attempt to reduce the dislocation was made. We did not, however, succeed in effecting the reduction until a slice of bone had been sawn off the projecting end of the tibia. After the reduction the limb was placed on an iron back splint, with two wooden slide splints duly padded and suspended from a cradle, the apparatus being of the kind used at St. Bartholomew's Hospital, in the wards of Sir James Paget when he was surgeon there, and supplied by Ferguson, the surgical-instrument maker. About three hours after the accident I syringed out the ankle-joint with a solution of carbolic acid in thirty-nine parts of recently boiled water, and then, after cleaning around the wound, applied a pad of lint of six or eight thicknesses, saturated with glycerinum acidi carbolici, taking care that the upper layers were of sufficient size to project some

little way beyond the wound, so as to exclude air effectually, in case of the patient becoming restless. This was then secured by a bandage. The next day all the upper layers of lint were removed, soaked as before, and then re-applied, except the three next the wound, which were left undisturbed. Then over the lint I put a large piece of carbolic acid plaster, and secured it with a bandage. This mode of dressing was repeated night and morning for several weeks, during the whole of which time not more than about a tablespoonful of discharge escaped from beneath the pad of lint. The discharge was of a pink color, opaque, and nearly solid. The bowels were confined, and pain and starting relieved with opium, for about a fortnight. After this the patient, who ate heartily his ordinary diet of meat, etc., the whole time, used to sit up in bed and write letters, and keep the account relating to his business. After six weeks I gradually reduced the amount of the carbolic acid by adding more glycerine, and when the wound was nearly healed I used spermacetic ointment. He ultimately made a good recovery, and can walk considerable distance with the aid of two sticks.

The next patient was a cab-driver, aged about fifty years. His horse fell down as he was driving, and while endeavoring to hold him up, he was pulled off his seat and broke his leg. He was then taken to the Weymouth Royal Hospital, distant seven miles from the scene of the accident. On his arrival there, I found that he had a lacerated wound about three inches long, through which the upper half of the tibia was protruding. After the fracture had been set, and the edges of the wound had been drawn together, except over the seat of the fracture, where, in consequence of the leg, the skin would not meet without more force being used than appeared desirable, a pad of lint about four thicknesses was saturated with carbolic acid and glycerine, and lightly bandaged on. The fracture apparatus used consisted of an iron back-splint. with two wooden side-splints, padded and suspended from a cradle, as in the previous case. Over the pad a piece of carbolic-acid plaster was placed. The next day a fresh pad of about four thicknesses was soaked as before mentioned, and applied over the previous one, and the plaster over them both. This dressing was repeated night and morning for about a fortnight, after which it was reduced to once a day. The man was on ordinary diet throughout, and there was no constitutional disturbance. About a month after the accident the lint next the wound was for the first time removed, and the wound found to have healed, except over the end of the bone, where there was a wound about an inch long, with bare bone exposed. The special treatment was now discontinued, and poultices were used. A little later a thin layer of bone came away, and the wound then soon healed, and then recovered with a useful leg.

The next patient was a brewer's drayman, a large made and very fat man, accustomed to the free use of the beverages he supplied. His horse started off while he was in a public house, and when he ran to their heads and endeavored to stop them he was knocked down, and before they could be stopped the front wheel

of the dray going over inner side of his knee, turned back a large flap of skin, and made a larcerated wound that extended into the knee-joint. A surgeon was called, and gave the foregoing account on resigning the charge of the case. When I saw him a large pad of four thicknesses of lint, saturated with the glycerinum acidi carbolici, was applied over the wound, and kept saturated by fresh supplies on its outer surface renewed daily. For a week or ten days all went well, and no trouble connected with the joint occurred afterward, but at the end of that time the lint came off, and poultices were used instead, the edges of the skin flap being found to be sloughing, and erysipelas of the leg commencing. The erysipelas followed a severe course, as it did also in several other cases that occurred about the same time, but in the end he recovered and returned to his occupation as drayman.

The next patient was a builder's workman, who fell from a scaffold eighteen feet high, thereby sustaining a severe compound fracture of the lower jaw, while another man falling upon him broke his thigh, and the bone coming through the skin wounded the internal saphenous vein, and caused such copious bleeding that the man appeared in danger of immediate death from loss of blood. Under these circumstances a large sponge was bound tightly over the wound, and the bleeding thus arrested. The fracture was then set, a long splint and bandages being used in the ordinary way. The treatment having reached this stage when I first saw the man, was cold, perspiring profusely, with livid face, and evidently almost dying from loss of blood, I applied the glycerinum acidi carbolici freely to the bandages over the sponge, and then lightly bound over them four thicknesses of lint saturated with it. The next day I removed the lint, cut slits at short intervals in the bandages, and ejected the glycerine through them with a syringe and along the upper edge of the sponge, and then reapplied the pad of lint freshly satuarted as before. This treatment was continued for a fortnight without disturbing the sponge, after which the sponge was removed, and the wound found to have healed. The man's health improved throughout, and he recovered in about the same time as if it had been a simple fracture of the leg.—*Lancet, June 18, 1881, p. 985.—Braithwait.*

DIPHTHERIA AND BACTERIA.

The supplement to the National Board of Health Bulletin for January 21st, contains the full report of the experiments conducted by Drs. H. C. Wood and H. F. Formad, of Philadelphia, under the auspices of the Board, with a view of determining the connection of diphtheria with fungi. This report is one which is a credit to American medicine, and would place Drs. Wood and Formad in a high place among the careful observers in any country. It is an eminently scientific report, and although the experiments undertaken have not yet been as conclusive in their results as one could wish, there is that in the record of them which inspires faith

in the ultimate practical good whieh will cro .vn the labors of these observers.

The experiments were undertaken to determine two questions: First, whether bacteria, which are always present in the false membrane of diphtheria, are identical in form and size with those which are present, not only in the membrane of non-diphtheritic tracheitis, but also in the inflammation of an inflamed tonsil; second, whether bacteria are always present in diphtheria, or only in some cases. To answer the first question a large number of cases were examined. These cases are divided into two sets: First, those of endemic or sporadic diphtheria; second, those of true malignant epidemic diphtheria. The experiments consisted of two sets, the first being conducted on eight mild cases occurring in Philadelphia, and the second on fourteen cases of malignant diphtheria as it occurred in epidemic form at Ludington in this State. Out of the seven cases, in which blood was examined during life for micrococci, in six no fungi was found, while in one case micrcocci were somewhat abundant in the vital fluid. Of the Ludington cases, fourteen in number, in seven micrococci were found, and in seven none were present. The cases in which there were no micrococci were all of them very light, or in the stage of convalescence, and the amount of fungi present in the malignant cases seemed to be proportionate to the severity of the symptoms, and to steadily progress with the disease in the fatal cases. "The study of these two sets of cases is sufficient," they say, "to enable us to formulate, as established, the proposition that in endemic mild diphtheria, micrococci are always present in the part locally diseased, but are usually not present during life in the blood, or in the glandular organs, even in cases which prove fatal; that in malignant epidemic diphtheria micrococci are always present in the part locally diseased, and are also usually, and perhaps always to be found in the blood and tissues of severe cases, but are frequently, if not usually, absent from the blood of mild cases."

Observations conducted to determine whether micrococci are fonnd in the blood of other diseases than diphtheria, and if so whether they are distinguishable from those found in the latter disease, were not conclusive.

Their testimony on that much mooted question, the identity of diphtheria and croup, is far from fortifying the position assumed by the dualist.

They say "It will be shown that the morbid cases which give rise in the respective lesions in the pharynx and in the air passages is the same, and the anatomy of the products identical." They claim that the apparent difference in the lesions and in the morphology of the exudates is altogether conditioned by and dependent upon the anatomical peculiarities of the pharynx and respiratory passage. The reasons which they give for such an expression are fully stated and are indeed very conclusive as arguments in favor of the identity of the two diseases.

The following summary is given of the chapter on the "Nature of Diphtheria:"

"The micrococci of diphtheria do not differ, so far as observed,

from the micrococci of furred tongue, etc., except in their tendency to grow in culture fluids.

The micrococci of furred tongue or ordinary sore throat have a less tendency to grow under culture than have the micrococci of endemic non-malignant diphtheria.

The micrococci of endemic or non-malignant diphtheria have a much less tendency to grow under culture than have the micrococci of malignant diphtheria.

The rapidity of growth of the micrococci is in direct proportion to the malignancy of the cases yielding them, and its contagiousness.

On exposure to the air diphtheritic members of the most violent type loses its contagious power, and the micrococci *pari passu* lose their power of growing in culture fluids.

Under successive generations of artificial culture the diphtheritic micrococci lose their growth, activity and also their power of infecting the rabbit.

It has not been experimentally directly proven, but it is a necessary inference from the two facts just stated, that under certain favoring circumstances the sluggish micrococci puts on growth, activity, and, in all probability, *poisonous properties.*

Every grade of case can be found in man from an ordinary sore throat, through simple pseudo-membranous angina and tracheitis up to malignant diphtheria.

Any inflammation of the trachea of sufficient intensity may cause the formation of pseudo-membrane."

If these experiments teach anything, it is that diphtheria is not a specific disease, or rather that the micrococcus which has been regarded as essential to the existence of the disease is not of a different nature from that found in healthy throats, but that in diphtheria this micrococcus has been stirred up into unwonted activity, the soil furnished by individual throats favoring such activity, and the rapid growth of the germ. They teach that the micrococcus finds a favorable soil in throats which would naturally be supposed to have the least powers of resistance, *e. g.*, in children and in debilitated adults. They teach also that diphtheria is first a local disease before it is a systemic, and inculcate the importance of early local treatment with a view to destroying the bacteria before they find an entrance into the circulation and to cause systemic infection. There is, of course, nothing new in these deductions, but the experiments give them increased weight and will lead to their more general acceptance.—*Michigan Medical News.*

CASES OF CEPHALIC VERSION IN THE POSTURAL POSITION.

ADDRESS BY JOHN HAVENSTEIN, M. D.,
President of the Erie County Medical Society. Read at the Annual Meeting January 10, 1882.

CASE I. Mrs. Van V., aged 31 years, tall, with well marked lateral curvature of the spine, was taken with labor pains with her first child at 9 o'clock p. m., on the twentieth of June 1879, and in

the absence of Dr. W. Ring, his son, Dr. Chas. A. Ring, attended her during the night. In the morning, Dr. W. Ring called and found the os uteri dilated to the size of a half dollar, the face presenting with the chin toward the left side. At 10 o'clock the following morning I first saw the patient in consultation with Drs. W. and Chas. A. Ring. An examination confirmed their diagnosis, and detected at the same time a marked projection of the sacrum forward, and consequent diminution of the conjugate diameter of the pelvis. The membranes had ruptured and the face was pressed firmly against the brain. It was agreed to attempt version of the head. The woman was placed in the knee and chest position, and I then passed my right hand into the uterus as far as enabled me to grasp the occiput, then flexing the head upon the chest, I succeeded in bringing down the vertex. In consequence, however, of the deformity, the head did not engage in the pelvis, and three hours after version of the head the forceps were applied and the woman delivered of a healthy child. The mother's convalescence was natural, and the child was thrifty in appearance.

CASE II. Dr. W. Ring sent for me at 10 o'clock a. m., December 8, 1880, to assist him in a case of face labor. The woman, Mrs. S., 29 years of age, with her first child, had been in labor twenty-four hours before I saw her. An examination proved the chin to be to left side, and not yet engaged in the upper strait. In consultation it was agreed, in order to expedite the labor and to relieve the woman of her sufferings, to resort to cephalic version. She was placed in the postural position, and my right hand was then passed over the occiput, and the face presentation was converted into one of the vertex. Labor was completed by the natural powers two hours after version. Mother and child made a good recovery, although the mother needed more than ordinary care to guard against inflammation.

CASE III. Mrs. C., aged 35 years, fleshy and strong, commenced her fourth labor at 5 o'clock a. m., March 17, 1881. Dr. Ring was called at 8 o'clock, and found membranes ruptured, the child presenting face downward, chin toward the left sacro-iliac symphysis but more nearly to the sacrum, child's head very large. At 10 o'clock a. m., Dr. Ring sent for me, and upon my arrival I found the condition as stated. The woman had powerful labor pains, and the face of the child was pressed with great violence against the brain of the pelvis, causing it to swell considerably. As soon, however, as the woman was placed in the postural position, my hand could readily be passed into the uterus; I found the fœtal head to be free and very movable, so much so that in order to fix it, I had to grasp the occiput with the points of my fingers. Version being completed, the child was born twenty minutes after; the effects of pressure were shown by a swelled face and closed eyes for several days, consequent upon the strong labor pains. The child weighed twelve pounds. Mother and child made an excellent recovery.

Such being some of my experience in face presentations, I concluded, after some hesitation, to acquaint my professional colleagues of this society with the facts of a mode of procedure in such cases,

that I have not found mentioned in the writings of obstetricians. For any merit that there may be in this method of correcting face presentations, I can truthfully say I am under obligations to no one for hints or suggestions in its adoption. The claim for originality, however, is immaterial; if I have succeeded in calling your attention to a practice which you will recognize and acknowledge after trial as an improvement in the management of face labor, *my labors* are compensated.—*Med. and Sur. Journal.*

FILARIA SANGUINIS HOMINIS.

Dr. Myers, of Takow, Formosa, has recently added to our knowledge of the *Filaria sanguinis hominis* the interesting results of numerous observations made by himself upon filaria-infected patients. He instituted these examinations, he tells us, at the request of Dr. Patrick Manson, with the object in view of investigating, and, if possible, confirming, the discoveries and observations made by that gentleman. He endeavored, therefore, to determine the proportion of patients affected, noting the external manifestations present,—*e. g.*, elephantiasis, lymph-scrotum, etc.; the periodicity of appearance and disappearance of the embryos; the cause of the diurnal disappearance, the centre of congregation, if any; the effects of "infilariation" of the monkey. After examining a large number of patients, he succeeded in finding but three in whose blood the filaria appeared, neither of whom, however, presented any appearnce of elephantiasis or lymph-scrotum. One of these, a boatman (born in Amoy, To Ah, by name), he succeeded in prevailing upon to submit to daily puncturing of the skin for obtaining specimens of blood for microscopic examination. This good-natured boatman, To Ah, was placed under a large mosquito-net, and mosquitoes from all parts of the island were allowed to feed upon him nightly. A trough was suspended within the net, and filled with water, upon which the mosquitoes deposited their ova. This water was given to monkeys to drink, no other fluid being allowed them except that contained in the bananas on which they were fed. Frequent examinations of the blood of To Ah showed the presence of the filaria at night and their absence during a greater part of the day. The temperature, taken at each observation, generally rose slightly with the appearance of the embryos, and fell again with their disappearnce. The mosquitoes fed upon To Ah were also subjected to microscopic examination, the half-digested remains of the embryos being all that could be found. The attempts to filariate the monkeys by allowing them to be bitten by these mosquitoes, and by compelling them to drink water upon which the ova of these mosquitoes had been deposited, both failed, the monkeys eventually dying of tuberculosis, a disease common among those kept in captivity.

Dr. Myers expresses the opinion that the mosquitoes which play the part of host in the embryo during its development must be of a different species from those found in Formosa, which di-

gest the embryo instead of nurturing it; and to this fact he attributes the apparent immunity of the natives of that island from the filaria.

In concluding his observations, Dr. Myers made a number of experiments upon the filaria with various drugs, such as arsenious acid, salicylic acid, bisulphate of quinia, and santonin, and was surprised to find that a comparatively large quantity was required to destroy it—sufficient, indeed, to destroy the patient as well.

Dr. Myers's paper is equally valuable and interesting, and reflects great credit upon its author for the untiring zeal and perseverance with which he has followed up the subject. We would suggest that the experiment be made of changing the hours of rest and maximum light by requiring the patient to sleep in a darkened room during the day, and to note the effect upon the appearance and disappearance of the embryos.—*Med. Times.*

POTASSIUM PERMANGANATE AS AN ANTIDOTE TO THE VENOM OF SERPENTS.

A NOTE COMMUNICATED TO THE FRENCH ACADEMY BY M. DE LACERDA (RIO JANEIRO)—*Gazette des Hopitaux.*

TRANSLATED BY DR. A. D. MATAS.

In order to study the action of certain chemical and botanical substances upon the phenomena which follow the inoculation of the venom of serpents, we began two months ago a series of experiments, which have led to results of the highest scientific and practical importance.

After recognizing the worthlessness of the perchloride of iron, borax and nitrate of mercury, tannin and various other chemical substances in relieving the effects of poisonous ophidian inoculations, we determined to try a substance which furnished us truly wonderful results—we refer to the permanganate of potassium.

The results obtained in the first series of experiments, by injecting the active venom of the bothrops, diluted in distilled water, into the subcutaneous areolar tissue of dogs, demonstrated plainly that this substance (the permanganate) was capable of arresting completely the local toxic manifestations of the venom. In carrying out our experiments we proceeded thuswise: A sufficient quantity of cotton was subjected to the bites of the reptile, and the venom collected in its meshes was diluted in a small quantity of distilled water (usually 8 to 10 grains of this menstruum); a Pravaz syringe was then filled with this solution and half of its contents injected into the cellular tissue of the buttock of a dog. One or two minutes after, or even after a longer lapse of time, an equal quantity of a filtered 1 per cent. solution of potassium permanganate was injected into the same region. These dogs, when examined the next day, did not present the slightest local lesion, at most a very small tumefaction, localized about the seat of the injection, without any infiltration or any other sign of irritation. And yet, the same venom which had served in these experiments, when injected without the antidote, always produced great local

tumefaction and more or less voluminous abscesses, associated with considerable loss of substance and destruction of tissue.

The results achieved in this first series of experiments by the simple hypodermic injection of potassium permanganate encouraged us to try the same substance in cases of poisoning from the intravenous injection of the ophidian venom.

Here, again, the permanganate of potash answered perfectly to our expectations. We have now repeated our experiment 30 times, and have barely met with two failures. These failures, however, may be attributed to various causes, which do not affect the general efficiency of the agent now under discussion. First, we may state that these experiments were conducted, in these exceptional instances, on badly nourished, very feeble and young animals; and again, the injections of the permanganate were administered too long after the introduction of the poison, when the heart's action was on the verge of suspension.

For a certain number of cases we injected intravenously half a syringeful (Pravaz's syringe) of a solution of the strength of 12 or 15 serpent bites (on cotton) in 10 grains of water, followed half a minute later, by 2 centigrams of a 1 per cent. solution of potassium permanganate. Outside of a very transient agitation, and sometimes of an acceleration in the cardiac pulsations, which hardly ever lasted over a few minutes, the animal experimented upon never manifested the slightest morbid phenomena. The inoculated animals were carefully observed for several days after the experiment, but they always seemed to be perfectly healthy.

In another series of cases, we injected the venom into the bladder and waited for the manifestation of the characteristic poisonous symptoms. Just at the moment when the pupils were observed to be greatly dilated, when respiratory and cardiac troubles, contracting involuntary micturition and defecation, indicated a condition of profound intoxication, we injected intravenously, 2 to 3c. centimeters of the same 1 per cent. solution of potassium permanganate, repeating the injections, one after another, until we observed, usually at the end of 2 or 3 minutes, or five at most, that the above phenomena disappeared; a condition of general prostration was the only perceptible result of the experiment, and this was hardly ever protracted over 15 or 25 minutes. If the animal was then placed on his feet, he could walk very well; he could run if compelled to, and in fact deported himself throughout like a healthy dog. And yet, other dogs that had received within their veins the same quantity of pure venom, without any counteracting agent, died every one, more or less rapidly.

These truly remarkable results, which attracted general attention, were witnessed at different times, not only by His Majesty, Don Pedro, who kindly honored us with his presence in our first experiment, but also by persons highly conversant in these matters, physicians, members of faculties, and members of foreign diplomatic corps, etc.

I therefore believe myself justified in asserting that the permanganate of potassium is a true antidote to the venom of serpents.—*New Orleans Med. and Surg. Journal.*

ABSTRACTS AND GLEANINGS.

Asiatic Cholera and Yellow Fever—Experience in the United States Respecting Them.—Dr. J. S. Billings, in American Journal of Medical Sciences, October, 1881, gives the following:

I. As regards cholera, this experience accords in most points with the conclusions of the Conference of Constantinople and Vienna. The quarantines of the United States have not been, and are not now, capable of preventing the importation of cholera. In the United States there is special danger of such importation through the personal baggage of emigrants.

When the disease has been introduced, more can be done in stamping it out, and in the way of personal prophylaxis, than in other pestilential diseases. The systematic disinfection of excreta, clothing, and persons, and the securing pure food and drink, are the means to this end.

II. As regards yellow fever, the epidemics of 1878 and '79 have produced considerable change in the opinions of American physicians. The majority believe that it is a specific disease—not connected with marsh malaria—due to a specific living cause, and not indigenous to, or endemic in, the United States, in which country it is always due to importation.

III. This importation might, to a great extent, but not entirely, be prevented by a proper system of quarantine, without causing undue obstruction to travel or traffic. The word quarantine includes what the Vienna Conference terms systems of medical inspection, either of ships, persons, or cargo, beyond the time needed for cleansing and disinfection.

IV. Measures which, without entirely preventing, will delay the importation of yellow fever, have a much greater relative importance than in other diseases, and for this reason inland quarantines are of much more value in this disease than in cholera.

V. The experience of 1879 is favorable to attempts to stamp out yellow fever by systematic cleansing and disinfection of the infected localities, and also by measures of depopulation and the formation of camps.

VI. Much of the practical difficulty in dealing efficiently with yellow fever being connected with diagnosis, attention is called to a recent attempt to formulate a diagnosis of this disease for sanitary purposes.

VII. From the practical as well as the scientific point of view, the great disideratum at present, as regards both cholera and yellow fever, is a test for the presence of their causes, other than the production of the disease in man.

VIII. Yellow fever cities are filthy cities, and yellow fever ships are usually foul ships. But we know of no city in the yellow fever region that is clean enough to make this rule of much importance

as regards them, and it would be very unsafe to act on the supposition that a clean ship cannot become infected.

IX. The greatest difficulties in the way of preventing the introduction of cholera and yellow fever into the United States, are due to want of reliable information as to the sanitary condition of foreign ports, and of vessels sailing therefrom. To overeome these difficulties, co-operation between the great commercial nations of the earth is desirable.

X. Some account is given of the effort of the National Board of Health to secure this co-operation through the International Sanitary Conference of Washington, and of the results of this Conference. The conclusions of this Conference are not satisfactory, and will give no practical result. The proper basis for an international agreement on the subject is the following:

1. Each government should secure prompt and reliable information as to the existence of cholera, yellow fever, and plague, within its boundaries, and especially in its seaports.

2. Each government should communicate this information to the other parties to the agreement, and especially to their consuls, or consular agents, at the sea-port. In case of the occurrence of either of the above named diseases, the communication should be made with the least possible delay—by telegraph, if practicable.

3. When bills of health are required by any one of the contracting governments, such bills should be signed by its own agents at the port of departure, and these agents should have the right to make such inspection of the ships as is necessary to enable them to certify to the bill of health.

4. The agents charged with the duty of signing the bill of health, should also have the privilege, in case either cholera, yellow fever, or plague exists at the port of departure, of making use of the telegraph to notify their respective governments of the departure of ships from such infected ports.

5. The bill of health should be of the form approved by the Washington International Sanitary Conference—it should be neither a clean bill, nor a foul bill, but a certificate in detail as to the sanitary condition of the port, and of the ship.

Blood-letting.—Dr. Mays, in a paper before the San Francisco Medical Society, (Western Lancet) very sensibly remarks:

Were our grandfathers right or wrong? Was bloodletting founded on principles so fallacious as to warrant its total extinction? Without entering upon a question of so great magnitude just now, I will venture to say that none of the great modes of thought that have ever dominated medicine are really dead. Methods of treatment change, but the principles of our science remain about the same they ever were. What medical man rejects the doctrine of fluxion, or refuses to believe that in acute inflammation the current of blood setting towards the irritated organ may be turned aside by venesection, and the progress of the disease stayed thereby?

The medicine of to-day is not built upon the ruins of the medi-

cine of yesterday; it may rather be likened to the upper tier of bricks in a noble though unfinished edifice. Yet there are many who imagine that the new must necessarily be a reversal of the old. As an instance of the current adoration of the brand-new, think how that useful, if a trifle pompous, word *antiphlogistic* has been dropped entirely out of our vocabulary. The medical writer of the day would consider himself disgraced if he used it He disowns both the word and the ideas it represents; yet at the next bedside he visits he puts into practice the very theory he derides. He does not fail to place his fever patient under regulations as to a low and carefully restricted diet—in other words, he carries out the antiphlogistic regimen. This is simply medical vandalism.

There is no danger of a revival of bleeding in its old aspects, nor do I wish to be understood as favoring such a movement; my plea is only for a more considerate bearing towards the forms of thought, our direct progenitors in the line of medical evolution. I would like to see the younger generation of physicians neither oblivious to the fact that venesection is often the very best therapeutic measure at their command, nor afraid to resort to it if they wish to.

The American Public Health Association.—The New York Medical Times (Homœopathic) thus speaks of the Public Health Association at Savannah:

All schools of medicine meet on the common ground of sanitation, or care of the public health. On this occasion, at Savannah, there was noticeable the pleasant mingling of the blue and the gray—the old Surgeon-General of the Confederate army (S. P. Moore), Majors, Captains, etc., of the same, cordially greeting their once Northern enemies; and the fraternizing of members of the two schools of medicine, which was largely promoted by our Dr. Falligant, who gave the only reception to the members of the A. M. H. Association. The generous hospitality of the Doctor and Mrs. F. was met by a pretty general attendance of all visiting members of the Association, and therapeutics found no place in the discussion of the excellent viands. The other social feature of the occasion was the excursion down the river to Tybee Island and return, given by the citizens of Savannah. A delightful *summer* afternoon, a bountiful collation with champagne, music and the Savannah ladies, made the affair a grand success.

The sessions of the Association were well attended by members, but not by citizens, except in the evenings. Discussions on papers read, showed a pretty thorough knowledge of the subjects under consideration, but there was the usual amount of time wasted on constitutional questions and resolutions which ought to have been tabled at once. One of these is worth noting here, for if its instructions were acted upon, the Homœopathic school would be left without representation in the National Board of Health. The resolution was offered on the false supposition that this Board would soon expire under the act organizing it; and provided that said Board be hereafter composed of members selected from the army and navy surgeons and members of State Boards of Health.

Such a formation of the National Board would effectually prevent popular representation on it. But after a long and warm discussion, a vote was taken which dropped the matter for the present.

Small-Pox.—The period of incubation of vaccina is from seven to nine days, so it is of the highest importance to vaccinnate as soon as the person is exposed, thereby superseding small-pox three days; or, if it must come, rendering it lighter. I am well aware that the adherents of vaccination are growing less year after year, but as it is the best preventive I know of, I shall continue to advocate it until something better is discovered. History tells us that before Jenner's time, it was estimated that there were about 600,000 deaths in the world, yearly, from this disease, and that Europe alone lost about 300,000 annually. I think it hardly reaches that at the present day, and as for its inducing other diseases, we have not sufficient grounds to rely upon.

Generally, the first symptom of small-pox is a decided chill or a chilly sensation, lasting a short time, followed by a fever, quite intense, on the tenth day after the exposure. This continues for a day or two with severe pain in the back, then small red spots will make their appearance, usually on the face first, having a granulated feel under the skin. The same manifestations may be seen in the throat and velum. After a few hours a clear fluid makes its appearance in these papules, converting them into vesicles, and soon a small, black depression may be seen on the top of the vesicle, called the umbilical spot, probably so called because it does not look like an umbilicus. This is the diagnostic mark where the other symptoms prevail. Chicken pox, or varicella, has the same general history. It is not my purpose, in this article, to enter into any detailed description of this disease, for that can be found in almost every text-book; nor to spend much time on the treatment, as different schools of medicine have different ideas in relation to it. But certainly, a reduction of the fever is of great importance, and I know of nothing better than aconite, gelseminum or veratum viride, to accomplish this end. The fever usually subsides spontaneously after the eruption fully appears, to re-appear again when the pustula stage commences. This may be due to the increased inflammation or from the formation of pus, or possibly to pyema. Tartar emetic in about one-hundredth grain doses is said to work wonders in mitigating the severity of the disease, and some have gone so far as to declare that it aborts it. Tartrate of potassa, dissolved in water, sufficiently weak to be made palatable for a drink, works magically in some cases; but, as a general rule, the disease will run its course, and a good treatment is to let it alone, lest harm be done. Give remedies to mitigate the great suffering as much as possible. Some mild narcotic or anodyne with pure, fresh air, frequent sponging of the surface with weak vinegar and water, or a solution of carbonate of soda, protecting the face from the air and light as much as possible, to prevent pitting, is good treatment and will carry more through safely to recovery than too much medication. And pray God that you do not catch it yourself. It is not considered contagious in its inci-

pient stages, or when first recognized by a careful physician, but highly in the pustular and dessicating stages. The scabs should all fall off, and the body should be thorougly cleansed, before the patient is allowed to mingle with the outer world.

About ten drachms of nitrate of lead dissolved in a gallon of pure water, to which add a tablespoonful of salt, will make one of the best disinfectants that can be used. Sprinkle the bed with it, keep clothes wet with it hung all over the room, and use it freely in the chamber utensils.

Heat is the best known disinfectant for clothing—the hotter the better—a blaze is the best.—*Investigator.*

The Period of Gestation and the Placenta of the Elephant.—The birth of a young elephant, at Bridgeport, is the second well authenticated instance of such an occurrence in captivity on record, a previous birth having taken place in Philadelphia in March, 1880.

Professor Owen, of London, in Vol. III, page 742, of his Anatomy of Vertebrates, mentions still another instance as having occurred August 3, 1865, the elephants having paired December 18, 1863, but does not state where the birth took place, nor does he cite any authority in reference to it.

Professor H. C. Chapman, of Philadelphia, who, from his connection with the Zoological Garden there, and his interest in comparative anatomy, had an opportunity to follow events in the case of the elephant Hebe from the first suspicions of pregnancy to parturition, made an interesting communication to the Academy of Natural Sciences, of Philadelphia, to be found in Vol. VIII., of its Journal, upon the placenta and generative apparatus of the elephant, presenting at the same time the injected placenta.

In the case of Hebe the first coitus took place May 29th, and the last June 20th, 1878; eight months later, there being good reasons to consider her pregnant, the question of the period of gestation arose, in regard to which we quote from Dr. Chapman's paper:—"Here again I was comparatively in the dark. In the Thesaurus of Seba, published in 1734, there is figured the fœtus of an elephant without any membranes, taken out of its mother at about the middle of the period of gestation. Zimmermann also gives a figure of a fœtus. In the description of this fœtus only vague allusions are made to the length of gestation. As is well known, among the ancients, Pliny thought the period of gestation was six months, Strabo about eighteen; according to Aristotle, however, nearly two years.

"What I had learned from travelers in the East, and from the case referred to by Professor Owen, the time being, in that instance, five hundred and ninety-three days, together with the fact of Aris'otle giving nearly two years, led me to indicate that about the first of March, 1880, would be the time at which the birth of the elephant might be looked for. The young elephant was born March 9th, exactly twenty months and twenty days after the last copulation, or twenty-one months and fifteen days, reckoning from the first one. The fixing of the period of gestation in the elephant

at six hundred and thirty to six hundred and fifty-six days, is another interesting illustration of modern investigation confirming the statements made by that most profound thinker and careful observer, Aristotle.

"The labor was a very short one, the mother standing on all-fours, with one hind foot slightly raised. The head presented. The umbilical cord broke, and was removed with the placenta and membranes shortly afterward by Mr. Arstingstall. Immediately after birth the mother rolled the young one in the straw. The young elephant, a female, stood thirty inches in height, measured from base of trunk to root of tail, thirty-five inches, and weighed two hundred and thirteen and one-half pounds. It was noticed immediately that it sucked with the mouth, and not with the trunk, as Buffon reasoned it must do. * * * * *.

"The placenta of the elephant is not only interesting on account of its rarity, but also from its combining the characters of the placentæ of three different sets of animals. The impossibility of using the placenta, in the case of the elephaut at least, as a means of classification is therefore sufficiently obvious."

The latest elephantine baby is stated to have weighed one hundred and forty-six pounds at birth, and the period of gestation, as given, was shorter by several weeks than in the case reported by Dr. Chapman.—*Boston Med. and Surg. Journal.*

Curability and Treatment of Pulmonary Phthisis.—Before having proved anatomically (as has been done recently) that tubercle had a natural tendency to heal, the curability of pulmonary phthisis was a clinical fact well demonstrated, and which M. Jacquoud had contributed both in his teachings and in his writings. His new book dedicated to the curability of consumption is a new affirmation, more complete and more decisive, to practitioners, and ought to be their constant study. This book furnishes details very interesting of the greatest value.

In the use of cod liver oil M. Jacquoud protests energetically against the insufficiency of the doses usually given. Six teaspoonfuls is the minimum dose given by Dr. J. Occasionally larger doses are given, commencing with small and gradually increasing each day so as to reach each week an additional spoonful. Various means are used to produce tolerance of the oil. Alcohol is the best; strychnine and ether are also good.

Fever alone (by reason of the alteration produced in gastric secretion), is a contra-indication to cod liver oil, and then glycerine should be well digested during the fever. As to the hot season, it will be no obstacle to giving the oil. Glycerine, though inferior to cod liver oil, is a good addition, and given in from 40 to 60 grammes daily, is only contra-indicated in persons of cerebro-cardiac excitability, in insomnia, and in high temperature. In addition, give one drop of the essence of mentha, 10 grammes of cognac or rum, which makes the mixture more agreeable.

Arsenic is also a remedy which Dr. J. associates with those above mentioned, and is contra-indicated when there is lassitude after a walk, and the medicine, if continued, causes feebleness in

the lower extremities. This is often the first symptom of arsenical saturation.

Among other remedies, creasote more rapidly and more surely diminishes expectoration and lessens bronchial lesions. This remedy unhappily produces certain difficulties. Commence with small doses, say from 3 to 5 grains, and gradually increase. It is better to give it in capsules, or to add to the oil or glycerine containing it, a drop of mentha.

The indications for the treatment of fever are variable. Quinine and especially the bromo-hydrate of quinine, is preferred, especially when there are cavernous indications or putrid expectoration, and then salicylic acid is also appropriate. The first day 30 grains of salicylic acid is given, and one-half this quantity each succeeding day. If the fever do not moderate, the dose is continued at 30 grains, in combination with cognac or rum, followed by a glass of water. If there be gastric intolerance, use the salicylate of soda, from 4 to 6 grammes, or with small doses subcutaneously. D. Jacquoud has studied the employment of benzoate of soda, by inhalations, so much praised by some physicians, but his conclusions are not so favorable as to lead him to continue it.

Dr. J. has seen all the localities he recommends, for phthsical patients and he favors the high latitudes of Davos de Saint Moritz et de la Maute Engadine.—*Journal de Therapeutique.—Therapeutic Gazette.*

Small-Pox and Vaccination.—M. Greenwood reports some interesting cases, which occurred in a recent epidemic of small-pox, and which illustrate very forcibly the protective effect of vaccination.

1. A woman suffering from small-pox suckled her child throughout nearly the whole period of the disease. The latter, vaccinated successfully a month before, never showed any symptoms.

2. Small-pox occurred in a German family and the oldest of four children eventually succumbed to it He was the only one in the family unvaccinated, and was nursed for nearly a week at home among the other three, all of whom escaped. The father believed in vaccination, but living in the United States at the time when this child was born, and vaccination being non-compulsory, he had neglected to have it done.

3. Small-pox broke out in a family of three children, none vaccinated. On the removal of the oldest, aged seven, to the hospital, the other two were vaccinated. though the mother said that the second child, aged five years, was not feeling very well at the time. The vaccination was successful in both cases; but in that child, as the vaccinal pustules were beginning to die away, just ten days after vaccination, a slight but distinct variolous eruption broke out over the body. The unvaccinated child died of the disease; the other scarcely had any constitutional symptoms at all, the vaccine, owing to its shorter period of incubation and action, having anticipated the action of the variolous poison, which was already in the system.—*British Med. Journal.*

The Use of Boracic Acid and Calendula in Ear Diseases.—Dr. Sexton in the Medical Society of New York (Med. Record) admits a boracic acid mixture as follows: This mixture is made of equal parts by weight of tincture of calendula and finely powdered boracic acid, as follows: Evaporate the calendula down in a water-bath, at a temperature of 150° F., to a pasty consistency, and then mix with one-half of the boracic acid; evaporate to dryness, add the other half, and triturate. I do not always employ this preparation in its full strength of the calendula, but frequentiy find it sufficiently strong when reduced by the addition of more or less pulverized boracic acid.

The local action of both of these remedies on supporating surfaces seems to be somewhat similar; they are, perhaps, antiseptic. and it is their nature to promote healing; by means of their action secretions are checked, odors are stopped, and healthy granulation promoted. In some otorrhœas the boracic acid may be employed as a dressing, and will not be found so heating as cotton-wool. In this way a light crust is sometimes formed over ulcerating or secreting surfaces, protecting the former while cicatrization goes on, and preventing the latter, when retained, from macerating the neighboring parts and undergoing decomposition

In by far the greater number of cases of suppurative otitis media, I prefer these drugs in combination. Their range of application is thus very extensive; when used in traumatic rupture of the drumhead, and in the myringitis accompanying perforative inflammation of the middle ear, the results have been most gratifying. In ulcerative inflammation of the external auditory canal of children, especially in the neglected cases among the poor, where the discharge is sanguineous, purulent, and highly offensive, the mixture is very efficacious.

After the removal of polypi, as soon as the bleeding has been arrested, it is sometimes useful.

The powder may be introduced into the ear through an aural speculum, or it may be blown in with a small insufflator.

In acute cases, the powder should at first be applied with great care, for in some instances it is not well borne at the beginning of the attack.

In nearly all cases, the discharge may be expected to lessen under this treatment; and when odor is present, its disappearance may be confidently expected to take place very soon.

The Treatment of Sea-Sickness.—Dr. Milan Soule, surgeon on the steamship City of Sidney, has written an account of his experience with the bromide treatment for sea-sickness, as laid down by Dr. G. M. Beard. His testimony to its efficacy is very emphatic and convincing. He says:

"About three years ago I began to use the bromides in treating sea-sickness, following, as nearly as possible, the direction given in Dr. Beard's valuable monograph on that subject. I had then been in the service of the Pacific Mail Steamship Company nearly four years. and as my field for experiment was large, I had tried nearly every drug or combination of drugs that had ever been pro-

posed for the cure or alleviation of this disagreeable malady. Repeated failures and humiliating disappointments had so shaken my faith in the power of drugs over this disease, that I began to use the bromides with a good deal of doubt and hesitation. Greatly to my surprise and gratification, however, I found that I was able to entirely prevent or greatly to alleviate the disease, and have not one single failure to record. The following is the combination I most frequently employ:

℞ Sodii bromidi..... ℥iv,
Ammonii bromidi..... ℥ij,
Aquæ menthæ piperitæ..... ℥iij.

M. S. A teaspoonful before meals and at bedtime; begin treatment three days before going on board.

"When preparatory treatment had been neglected and the disease fully established, I put a teaspoonful of the above in a half-tumbler of water, add a drop of ext. ipecac. fluid, and gave a teaspoonful every five minutes; it generally relieves the patient in less than an hour. I have received several letters (guinea enclosed) from passengers asking me to send them the above formula. Next to the bromides, I have found hyoscyamia the most successful remedy. Atropia will frequently afford relief, but is not altogether safe, as I have noticed a few cases of retention of urine to follow its use. I gave nitrate of amyl a fair trial, but it proved a complete failure. I have notes of several cases where the bromides entirely prevented sea-sickness during voyages of from twenty to thirty days, although these patients were always sick on previous voyages."—*Ex.*

Sulphide of Calcium in Strumous Ophthalmia.—The good effects resulting from the use of sulphide of calcium in the sores of scrofulous children, and in other affections associated with this diathesis, have been particularly insisted upon by Ringer. It is now my purpose, however, to speak of its value in "strumous ophthalmia." Under this head I allude to phlyctenular and pustular conjunctivitis and keratitis, the characteristics of which I need not further mention. In many of these cases, when other remedies have been used for some time with little or no benefit, the sulphide of calcium has proven of great service. I do not know if it has been much, if at all, recommended in this class of cases, but I was led in the outset to employ it by noticing its beneficial effects in other scrofulous affections, and this especially in the practice of my friend, Dr. Dyson.

The sulphide will be found particularly serviceable in those cases of children with manifest strumous habit, enlarged cervical glands, swollen face, the eyelids tightly closed, photophobia, and where, on opening the eyes, a gush of hot tears is emitted, and examination of the ocular surface discloses one or more phlyctenules on the cornea, or it may be merely increased vascularity of conjunctiva. These cases treated by the ordinary constitutional and local remedies are often tedious, but with the sulphide of calcium, coupled with the usual applications to the eyes, such as atropine and warm

fomentations of poppy, or what not, frequently quickly yield a happy result. In other cases also of phlyctenular conjuctivitis or keratitis, and not alone in children, the good effects of this medicine are conspicuous. Of course, like all other drugs, it will be hardly likely to be suitable for, or to benefit, all cases, but I have now employed it with good results so frequently that I am quite satisfied as to its being a useful remedy. After little or no benefit with steel in its various forms, and cod liver oil, the rapid recovery often after the substitution of the sulphide has been astonishing. The mode of administration is generally in the form of a powder, and from gr. 1-10 to gr. ¼ of the sulphide, with a few grains of sugar of milk, are given about three times daily. In this way children take it readily.—Simon Snell, in The Practitioner.—*Mich. News.*

Iodide of Potassium in Frontal Headache.—Dr. Haley states, in the Australian Medical Journal for August, that for some years past he has fonnd minimum doses of iodide of potassium of great service in frontal headache. A heavy dull headache situated over the brow, and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food, which sometimes approach to nausea, can be completely removed by a two-grain dose dissolved in half a wineglass of water, and this quietly sipped, the whole quantity being taken in about ten minutes. In many cases the effect of these small doses has been simply wonderful. A person who a quarter of an hour before was feeling most miserable, and refused all food, wishing only for quietness, would now take a good meal and resume his wonted cheerfulness. The rapidity with which the iodide acts in these cases constitute its great advantage.—*Louisville Med. News.*

Treatment of Wine-marks by Electrolysis.—The object, as in scarification and puncture, is to excite sufficient inflammation to destroy the fine net-work of blood-vessels. A simple needle, or an instrument containing a dozen or more needles, with points upon the same plane and about two millimeters apart, is attached to the negative cord pressed into the skin and the electrolytic action serves to destroy the capillary net-work. The instrument used is a small brass disc, which carries numerous fine cambric needles. When the circuit is completed, a blanching of the tissue for a small space around the needles is immediately observed. With ten or twelve cells of an ordinary zinc and carbon battery, the needles should be allowed to remain ten to thirty seconds, depending upon the delicacy of the skin and the effect produced. The blanching disappears in a few moments. The effect of the electrolysis becomes evident in about three weeks. In aggravated cases, there might be a return of the color, when a very fine and flexible steel needle, introduced in an oblique direction beneath the skin to the depth of a centimetre or more, should be used. By this means he destroyed the larger vessels from which the supply of the capillary vessels was received. The objectionable features were that the operation was a somewhat tedious and painful one,

a slight danger of causing suppuration and superficial sloughs, and a tendency to the formation of small keloidal-appearing outgrowths, and sometimes small ulcers and depressed scars, or small, firm vascular nodules. The operation does not leave a perfectly normal skin, but the condition may be greatly improved.

Dr. Sherwell, of Brooklyn, thought that the same results could be obtained by multiple puncture with a needle or disc of needles, the ends of which had been tipped with a caustic, as chromic or carbolic acid.

Dr. Knapp, of New York, suggested that if the starting-point of these marks could be found and destroyed, the remainder would be obliterated. An illustrative case was cited.

Dr. Sherman, of Ogdensburg, cited a case in which spontaneous ulceration occurred at the point, and produced the same result mentioned by Dr. Knapp.—*New York Medical Society-Record.*

Questions on Vccination.—Referring to the discussion on vaccination in your journal—

1. I know that some persons are temporarily insusceptible to the effects of vaccine virus. One case, among many in my practice, is this: I was called to a man whom I found with the symptoms of malignant small-pox. I asked him why he had not attended to vaccination? He noticed the tone of fault-finding in my voice, and said: "You cannot blame me, Doctor, for I have been vaccinated twenty-two times, and you have vaccinated me three times yourself." He died in three or four days. There can be no doubt that *he had been insusceptible* to the effects of vaccination; but I have no doubt that if he had been vaccinated within a short period before he was exposed to small-pox, the vaccination would have taken effect and his life would have been saved.

My record of 26,399 vaccinations, to date, show many scores, I think hundreds, of cases, where children were vaccinated with perfect success, who had been unsuccessfully vaccinated previously, from one to fifteen times. It is probable that a considerable number of these had been temporarily insusceptible to the effects of vaccination, though in the greater portion of the cases the failure was the fault of the vaccination.

2. Another case may have some bearing upon another point discussed by your correspondent:

A child was born of a woman sick with modified small-pox or varioloid. The case was severe, the eruption was profuse, and the child was born on the fourth day of the eruption. I vaccinated the child when it was just twenty-four hours old, and at the same time another child about two years old, who had never been vaccinated. The vaccination produced a perfectly typical result in both children; they both remained in the room with their mother, and in the adjoining room, and neither of them had the slightest symptoms of small-pox. The tenement had only two rooms. The disease in the mother had not protected the child from the effects of vaccination. Want of time prevents me from inflicting a much longer story of experience upon you.—E. M. S., *in Med. and Surg. Rep.*

Treatment of Laryngeal Phthisis.—Dr. Maurice Schmidt, Frankfort-on-Maine, in Edinburgh Medical Journal, says;

Up to the present time the treatment has almost always been limited to relieving the sufferings of patients as much as possible.

The treatment which I prescribe contains nothing new, the free scarifications excepted. All the other remedies have already been employed by other physiciens. The treatment is divided into two parts—the treatment of the lungs and that of the larynx. As to the first, this is not the place to discuss it. My experience has shown me the superiority of non-medicinal treatmentt physiological if you like.

I would like to say, in a few words, what this treatment is which I make my patients carry out.

(1) Constant residence in an atmosphere as pure as possible both day and night. I induce my patients to keep their windows open during summer or half-closed during winter. I send those who have the means into the mountains, the forests, or to the country. I only make one exception, for patients attacked with inflammation of the larynx, however slight, with whom the climate of the high Alps does not appear to me to agree.

(2) Exercise of the lungs, suited to the strength of each patient to facilitate the expulsion of mucus, and to induce the patients to profit by what remains of their lungs to promote hematosis.

(3) To stimulate the functions of the skin by dry rubbings or by bathing in cold water. A secondary benefit of this remedy is that the patients are hardened against changes of temperature.

(4) A good mixed nourishment, not exclusively animal. During summer, milk cure; during winter, large doses of cod-liver oil, if the patients can bear it, if not they are replaced with food of a fatty nature. Treatment of affections of the stomach.

Carcinoma of the Breast.—Dr. Gross, in a paper read before the New York Academy of Medicine (Boston Medical Journal) draws the following conclusions:

1. That surgical intervention in carcinoma of the breast tends to retard the progress of the disease by preventing local dissemination, implication of associated lymphatic glands, and the development of visceral tumors.

2. That local reproductions do not militate against permanent recovery, provided they are thoroughly and early excised, as soon as they appear; and that lymphatic involvement does not forbid operation, since, in fact, glands were removed in more than one-third of the examples of final cure.

3. That the subjects are almost without exception saved from local and general reproduction, if three years have elapsed after the last operation.

4. That the risk from operations is outweighed by benefits which accrue from them, since they not only add twelve months to the life of the patient, but also cure one-half as many patients as they destroy.

5. That all carcinomas of the breast—if there is no evidence of

metastatic tumors, and if thorough removal is practicable—should be dealt with as early as possible, by amputating the entire mamma, integument and all, dissecting away all the subjacent fascia, opening the axilla, with the view to exploration and removal of all the glands not palpable prior to interference.

Acute Rheumatism.—Prof. Latham (Cambridge Medical Society) has advanced a new theory as to the pathological changes in the blood in acute rheumatism, and maintains that the first step was a lowering of the action of the "inhibitory chemical centre," or nervous centre, which controls oxidation in the muscular tissue. Following upon this, the oxygen from the oxyhæmo-globin, instead of entering the muscular tissue to be exhaled therefrom in the form of carbonic acid gas, had its sojourn in the tissue shortened, and passed into the blood in the form of lactic acid (a substance which appears in muscle almost instantaneously with its death). That the oxygen acted also more energetically on the muscular tissue, and the resulting lactic acid being oxidized rapidly in the blood, instead of the muscular tissue, an abnormal amount of heat or pyrexia was developed.

He then argued that quinia lowered temperature by simply impeding the carrying of ozone from the lungs to the tissues by the red corpuscles, as in Binz's experiments with ozonized turpentine and guaiacum; and so the remedy might act beneficially in rheumatism, but would have no effect on the materies morbi.

Salycilic acid, on the other hand, lowered the temperature and cured the disease by mechanically combining with the substances from which the lactic acid is derived, and producing less heat than would from the oxidation of that substance. He recommends large doses to be continued for a long time.—*Dr. Faison, in Transactions of N. C. Med. Society.*

On the Removal of Warts.—Dr. W. Allan Jamieson says, in the Practitioner for September, 1881, that chromic acid, one to one of water, is by far the best remedy. The skin round each wart is first protected by painting it with oil, and then the wart itself is soaked with the solution of chromic acid; this absorbs water from the tissues, coagulating and hardening the albuminous tissues at the same time, and the unsightly wart soon disappears. These warts seldom appear after puberty on the hands, but a healthy girl well grown, aged fifteen, came to the writer sometime since with a dozen of them on her hands, which annoyed her for six years. Of course they much interfered with work, being always in the way. Steady use of the chromic acid removed them in a few weeks.—*Independent Practitioner.*

Vaccination in Scotland.—Scotland is greatly in favor of vaccination. Dr. Robertson's report of the vaccination of children born in Scotland in 1879, states that only one individual refused to have his children vaccinated. Small-pox has not caused much trouble since 1847, in which year there were 1,246 deaths. In 1880 there were only 10 fatal cases.—*British Medical Journal.*

Oil of Wintergreen as an Effective Salicylate in Rheumatism.—An able chemist, namely, Mr. P. Casamajor, of Brooklyn, informs the writer of this paragraph, that arguing from a purely chemical position he expected to obtain better results in acute or subacute rheumatism, and perhaps in chronic rheumatism also, from the use of oil of gaultheria, or wintergreen. This oil is mainly methyl salicylate, and was among the earliest sources of salicylic acid. Mr. Casamajor supposes that this salt of salicylic acid would be easily appropriated in the economy, and would prove more effective than other salicylates of more fixed character. Carrying out his ideas he had treated himself and several friends who had been subjected to rather sharp attacks of rheumatism with oil of wintergreen and with somewhat marked benefit in every case tried. He takes, and gives the oil in doses of ten drops dropped on sugar, and the sugar then mixed with a little water and swallowed about every two hours until the pain is relieved. This simple procedure is well worthy of extended trial and closer observation.—*Dr. Squibb.*

A New Cinchona Alkaloid, from Cuprea Bark.—The London Pharmaceutical Journal and Transactions of December 17th, p. 497, has two articles upon a new alkaloid found in the recent coppery colored cinchona bark which has come in large quantities from South America, and is much used by makers of salts of quinia. One paper is by Messrs. B. H. Paul and A. J. Cownley, and the other is by Mr. W. George Whiffen.

These papers concur in their description of an alkaloid not before known, but which is very much like quinia. The sulphate is very much like the sulphate of quinia, but some of the other salts resemble those of cinchonidia. Its chief characteristic as stated by Mr. Whiffen, is its action on polarized light. It rotates the polarized ray to the left more powerfully than quinia, or than any of the alkaloids of cinchona, and therefore he proposes to distinguish it as "ultra-quinine." It has not been separated in any considerable quantity as yet, and nothing seems to be known of its therapeutic value. From its apparent position in the scale of the cinchona alkaloids, it should not be inferior to quinia.—*Dr. Squibb.*

"Hazeline" as a Local Application in Irritable and Inflamed Piles.—During the past few months I have given a somewhat extended trial to the new extract of Hamamelis Virginica, called "hazeline." As a local application in irritable and inflamed piles situated at the margin of the anus, where the remedy can be readily applied, I have never met with its equal. In most of the cases submitted to the treatment, the relief was immediate and permanent. My plan has been to have the part bathed in the solution three or four times a day, and a piece of lint dipped in it kept applied to the anus during the intervals. All urgent symptoms have passed away, as a rule, in from twelve to twenty-four hours.—*Braithwaite's Retrospect.*

SCIENTIFIC ITEMS.

The Agricultural Ant of Texas.—The existence of ants who carried on some of the processes of agriculture was known as far back as the time of Solomon, as proved by the well known passage in the Book of Proverbs, in which he praises their exceeding wisdom, and bids the sluggard to consider their ways; but as investigations of the habits of European ants led to the discovery that they none of them make provision for winter use, for the good reason that as they hibernate they do not require to do so, it came to be believed that Solomon had only adopted a popular fallacy; modern research has, however, proved that, after all, Solomon was correct, for there are two species inhabiting the countries bordering upon the Mediterranean that harvest seeds, and now we have from the other side of the Atlantic a full description of the mode of life and operations of farmer ants.

Mr. McCook, a Presbyterian minister of Philadelphia, provided by the liberality of his congregation with time and means for careful investigation, records that the *Pogonomyrmex barbatus* of Texas carries on what may be well and justly called "farming" like a true backwoodsman. As soon as a new colony is founded, the settlers proceed to clear the ground. This they do by biting through the stems of the grasses, allowing them to wither, and then pulling up the roots, and having cleared a circular space varying in diameter from one to ten feet, according to the strength of the community, this is afterwards kept free from all growth save of one particular species of grass, the seeds of which form their favorite food. It has been surmised that they sow the crop, but Mr. Cook's investigation failed to establish the proof of this; but they do not rely solely on the produce of their own clearing, but make diverging roads—in some cases upwards of 60 feet in length and 2 inches in width—into the surrounding jungle, and send out foraging parties in search of various grass seeds. These are borne home and deposited in their subterranean dwellings, the work being carried out from early morning till sunset, but with a rest of some hours during the heat of the day, when the busy workers retire under ground for protection from the sun's rays.—*Dru. Circular.*

Flowers in Sleeping Rooms.—The London Lancet makes the following remarks on the practice of keeping flowering plants in sleeping apartments:

The public are again warned against the use of flowers in sleeping apartments; and wonderful stories are told of the deleterious effects which have followed their presence in a limited atmosphere respired by invalids. Curiously enough, these appalling "instances" of the evil influences of plants do not for the most part apply to flowers. Nevertheless, we agree that it is safe to banish growing plants and flowers from bedrooms. They can do no good, and they may do some harm, if only by rendering the air of the apartment irritating to the delicate lining membrane of the

breath organs. We are not disposed to endorse or accept the charge brought against plants and flowers generally, but it is well to err on the side of prudence; and although it cannot be denied that these embellishments form most pleasing objects for the eye, this advantage must be sacrificed, if, as alleged, they are injurious. There can be no doubt that some plants give off noxious emanations, and others may scatter particles which prove irritating; but are all vegetable growths thus injurious? However, as we have said, it is well to be over cautious. So flowers and plants must needs be banishsd, though we part with them with unfeigned reluctance.—*Drug. Circular.*

Pulmonary Gymnastics.—Dr. D. F. Powell, of LaCrosse, Wisconsin, writes to the New York Medical Record, as follows: "Ten years ago my chest measurement during full-forced inspiration was thirty-seven inches. By systematically inhaling and distendir g the air-cells as recommended by Niemeyer (and Smith, in the Record of Octocer 29, 1881), I have increased chest measurement to forty-four inches, and have wonderfully developed the pectoral and intercostal muscles. I write this to warn those who may adopt pulmonary gymnastics against inspiring air at too low a temperature, as I have on several occasions suffered from acute bronchitis, brought on by the forced inhalation of 'raw' cold air. I find that deep inspirations of pure air, at a temperature of from 60° to 80°, are of marked benefit in nearly all incipient lung diseases. I also freely use air medicated with carbolic acid, tar, iodine, bromine, nitrate of potash, etc., as indicated, and believe that no other treatment equals it as a remedial agent."—*Ibid.*

Milk to Extinguish Petroleum.—The first impulse of the inexperienced is to throw water upon burning kerosene oil, but the oil, being lighter than the water, rises upon it, and the only result is to make the fire spread. Several cases have recently been reported in the Metal Worker, where milk has proved an efficient extinguisher when every other means had failed. It may be doubted whether the well watered milk that reaches city tables would answer. The question also arises whether it would not be well to put a little milk in our lamps on filling them, so if they happen to explode, or are broken by a fall, the milk will be there, ready to act at once, without waiting for the milkman to come around.—*Boston Journal of Chemistry.*

Effects of the Electric Light on the Eyesight.—M. Nodier mentions in the Revue Scientifique, December 10, 1881, the instance of two naval officers, who, after some experiments with the electric light, were attacked with quite serious visual troubles; there were marked photophobia, slight conjunctivitis, lacrymation, contraction of the iris, and flying spots in the eyes.—*Drug. Circular.*

A German patent has been issued for a bottle made of twelve per cent. of silicum, which is said to resist the strongest acid. It is also recommended for the iron plates of zinc and iron galvanic batteries.

PRACTICAL NOTES AND FORMULÆ.

Aloes for Piles.—Dr. Fordyce Barker advocates the use of aloes in hemorrhoids. The following formula is proposed by him:

R Pulv. aloes soc. } aa ℈j,
Saponis castil. }
Ext. hyoscyami. ℥ss,
Pulv. ipecac. grs. v.
M. Ft. pil. No. xx. Sig. One morning and evening.

When the patient is anæmic he adds to the above 20 grains of the sulphate of iron. A popular and very useful aperient in piles is a combination of equal parts of the bitartrate of potassium and sulphur, given in milk. Sulphur internally exercises a most soothing influence on the inflamed tumors, more than can be fairly attributable to its aperient action. In those who have, or are predisposed to have, hemorrhoids. Dr. Barker recommends the following:

R Magnesiæ sulph }
Magnesiæ carb } aa ℥ss.
Potass. bitart. }
Sulph. sublim. }

M. Sig. From a teaspoonful to a tablespoonful of the powder in a wine-glass of sugar and water before breakfast. This powder produces a soft evacuation, without pain, even when the tumors are inflamed.—*Bulletin.*

Styptic Colloid.—The Chemist and Druggist (London) says that the following will instantly coagulate blood, forming a consistent clot, under which wounds will readily heal:—

Collodion	100 parts.
Carbolic acid	10 parts.
Tannic acid	5 parts.
Benzoic acid	5 parts.

Mix the ingredients in the above order.—*Med. and Surg. Reporter.*

Ergotine in Pharyngitis.—The Revue Mensuelle de Laryngologie, indicates a therapeutic method which may give good results in cases of chronic pharyngitis, complicated by exaggerated enlargement of the pharyngeal veins, and muco purulent secretions. It advises the use of—

R. Ergotine	grs. xv.	
Tincture of iodine	℥ j.	
Glycerine	f ℥ viiss.	M.

To be liberally applied, twice a day, on the pharynx, by means of a brush.—*Med. and Surg. Reporter.*

Mild Tonic Bitters.—

Gentian root	1	ounce.
Cardamom seed	½	ounce.
Tincture of fresh orange peel	2 to 4	drachms.
Alcohol	2½	ounces.
Simple syrup	2	ounces.
Water, sufficient to complete	1	pint.

Mix together the tincture, the alcohol, and five ounces of water, and with the mixture moisten the gentian and the cardamom previously reduced to a coarse powder. After twenty-four hours' contact, pack the drugs in a percolator, and exhaust them first with the alcoholic menstruum and then with enough water to complete fourteen ounces of percolate. Add to this the syrup, and filter through paper.—*Drug. Circular.*

For Syphilis.—Hydrargyrum and iodide of potassium for tertiary syphilis:

(A.)

℞ Hydrarg. bichlor. . . . . gr. j,
Potass. iodid. . . . . ℥ij,
Tr. cardam. co. . . . . } aa ℥ij,
Tr. gentian. . . . . }
M. Dose, one drachm.

(B.)

℞ Hydrarg. bichlor. . . . . gr. j¼,
Potass. iodid. . . . . ℥iij,
Tr. cardamom. co. . . . . ℥iij.
M. Dose, one drachm.

(C.)

℞ Hydrarg. biniod. . . . . gr. ss,
Potass. iodidi. . . . . ℥j,
Syr. sarsap. co. . . . . ℥ij.
M. Dose, one drachm three times a day.—*Drug. Circular.*

Herpes Zoster.—Dr. Boardman, in Buffalo Medical Journal, reports a case of this disease cured promptly by the following prescription. A good combination, doubtless, but too strong to use upon an extensive surface—

℞ Carbolic acid. . . . . ℥ii,
Ol. oliv,. . . . . ℥i.

Signa: Rub well on the parts two or three times daily

Kelly's Tonic—

℞ Tr. nucis vomicæ. . . . . f. ℥ij,
Acid. nitromuriat. dil. . . . . f. ℥iij,
Tr. cinch. co. . . . . f. ℥jss,
Tr. gent. co. . . . . ad f. ℥iij.

Dose, two drachms, in water, three times a day.—*Drug. Cir.*

Macdonald on Carbolic Acid in Whooping-Cough.—Dr. Macdonald (Edinburgh Medical Journal, 1881, p. 1094) says that on extended trial he finds carbolic acid, in doses of one-fourth of a minim to a child of six months, one-half minim for a year, and one minim for two years and upwards, to be the best remedy for whooping-cough. The whoop goes; the vomiting ceases; the paroxysms are modified in intensity and frequency. This result Dr. Macdonald believes to arise from an action similar to that of creasote on the motor fibres of the vagus of the stomach, and from a lowering of vitality of the specific germ of whooping-cough diseases. This points to the antiseptic treatment of the zymotic diseases generally.—*London Med. Record.*

The Use of American Ash Bark.—This agent is said to be very efficacious as an absorbent and deobstruent. It acts with special reference to the uterus. It attacks the benumbed or torpid vasc-motor nervous system, arouses it to new vitality, acts mildly but persistently in its secondary effects upon the absorbents, thus gradually reducing size, and bringing the uterus back to its normal condition. The time of cure varies from six weeks to three months. The wine should be taken in drachm doses before each meal. It yields its virtues only to a light wine, not exceeding 18 per cent. of alcohol.—*Therapeutic Gazette.*—[A good formula for using this drug in enlarged spleen and hepatic engorgement is:

℞. Wine of American ash..... ℥iv.
Iodide potassium..... ʒjss. M.

Teaspoonful three times per day.—ED. RECORD.

Hamilton's Tonic.—

℞ Strychniæ sulph..... gr. viij,
Cinchonidiæ sulph..... ℥j,
Tr. ferri chlor..... ℥vj,
Syr. zingiberis,
Acid. phosphoric. dil..... aa ℥xvj.

Dose, one teaspoonful three times a day.—*Drug. Circular.*

Anti-Rheumatic Mixture.—(Mistura Antiarthritica.)

℞ Potassii iodidi..... ʒv,
Vini colchici sem..... ℥j,
Tr. cimicifugæ rac..... ℥ij,
Tr. stramon..... ℥ss,
Tr. opii camp..... ℥jss.

M. Dose, ʒi. three times a day.—*Drug. Circular.*

Effervescing Mixture.—(Dr. Draper.)

[No. 1]—℞ Acidi citrici,
Ferri et quiniæ cit..... aa ʒiv
Aquæ,
M.—Syr. limonis..... aa f. ℥ij.

[No. 2.]—℞ Potass. bicarb..... ʒiv,
Aquæ.....ad ℥iv

M. One fluid drachm of each in two drachms of water, to be mixed at the time of taking.—*Drug. Circular.*

EDITORIALS AND MISCELLANEOUS.

SOUTHERN MEDICAL COLLEGE COMMENCEMENT.

The third Annual Commencement of this institution took place at DeGive's opera house, Atlanta, Georgia, on the evening of March the 1st, 1882. The audience was very large, and composed of the best citizens of the city. The ladies were out in unusual numbers, presenting a splended array of life and beauty; the music was exquisite, and the entire scene one of rare interest and attraction.

The class of graduates was arrayed in two divisions upon the stage with the Faculty in the centre. The exercises were opened with a fervent and eloquent prayer by the Rev. Henry McDonnald.

DEAN'S REPORT.

Dr. W. P. Nicolson, Dean, read his annual report to the Board of Trustees, touching the prospects of the Institution, in which was stated that the session now closing had been more prosperous financially and otherwise, than any previous one, giving great promise of the fulfillment of the designs of the founders, in establishing a great, leading, central medical school in Atlanta. The Institution is now well known over the entire country. The number of matriculates the present session was 124, representing the following States: Georgia, Alabama, South Carolina, Florida, Tennessee, Mississippi, Virginia, Maine, Texas and Arkansas.

The report alluded to the Hospital enterprise which had been inaugurated by the Ladies' Hospital Association and a house and lot purchased and donated to the Southern Medical College, and which failed to be in readiness for the present session as had been promised, on account of a bill of injunction filed by a few citizens in the immediate vicinity of the hospital building who, though friends to the college and the hospital enterprise, objected to its being in their immediate proximity. The injunction was successfully resisted by the Hospital Association and the Faculty and set aside, but too late to put the hospital in full operation for the present session. The hospital building is now undergoing thorough repairs, and the hospital will be in full operation on or before the first of September next, and the profession may rest assured that no effort will be spared to push forward every improvement and facility essential to the demands of the highest medical education.

CONFERRING DEGREES.

Rev. A. J. Battle, LL. D., president of Mercer University, and a trustee of the Southern Medical College, then conferred the degree of Doctor of Medicine upon the following graduates, to-wit:

Georgia—J. C. Beauchamp, L. T. Boatright, J. D. Bowers, L. H. Cartledge, G. W. Clower, M. W. Coffee, J. B. Courson, G. W. de LaPerriere, I. G. Dorris, J. A. Price, F. A. Rauschenberg, J. T. Roan, W. F. Robertson, G. L. Sawyer, W. H. H. Peek, C. B. Sewell, J. H. Sims, J. N. Smith, G. C. Spearman, W. D. Vinson, M. H. White, B. T. Wise, S. J. Ellis, J. P. Gwyn, I. N. Huffaker, A. R. Jones, Dock Long, R. B. McCants, T. P. McElreath. H. F. Coleman, G. E. Jones, of Alabama. T. M. Beaty, J. W. Mitchell, of South Carolina. J. H. Young, of Virginia. W. T. Foute, of Tennessee. W. J. Hannah, of Florida. B. F. Bradbury, of Maine.

AD EUNDEM LIST.

G. M. McDowell, Robert Harper, Pleasant Wilson, C. S. Strother, of Georgia; William Hawkins, C. S. Webb, J. M. Hundley, of Virginia; F. A. Bizell, J. H. Banks, of Mississippi; O. N. Bradbury, of Maine.

The graduates came forward separately as they were called, gracefully bowing as they received their diplomas at the hands of the Dean. During this exercise the audience was greatly animated, and numerous bouquets were showered upon the happy recipients, and rounds of applause given, the ladies participating.

ANNUAL ADDRESS.

Dr. Battle having first formally conferred the degrees in Latin, then addressed the audience extemporaneously for a half hour in an easy, graceful and eloquent manner. He alluded first to the rapid development and remarkable success of the Southern Medical College, passing high compliments upon the Faculty. He spoke in glowing and eloquent terms of the nobility and high mission of the medical profession. Medicine, as a study, embraced many collateral branches of science—physics, chemistry, geology and astronomy constitute the ground work and basis of the profession, and when these with psycological science were conjoined, then the grandest results were to be expected. Gladstone truly said that medicine will be the profession of the future. The Doctor's remarks upon the beneficence of the profession, and its good deeds, scarcely second to the ministry, and like to that of the great Physician Himself, who went about doing good, were truly eloquent, and well calculated to impress his hearers with new and exalted views of the beauty and nobleness of the medical profession. His remarks upon the importance of cultivating a love for science and for all truth, and of keeping well up with the progress of the age, were well timed and appropriate. And his allusions to the unseen universe of knowledge, and to the God of nature, and to the fact that in honoring the profession, we should not lose sight of the Creator whom we must honor and adore as the author of all truth and of all good, were forcible, eloquent and impressive. The entire address, at which we have scarcely glanced, was among the best we have ever heard on any similar occasion, and was listened to with profound interest and attention.

THE VALEDICTORY.

The address of the Valedictorian of the class, Dr. J. H. Sims, was then delivered, in which the young man did himself much credit. He spoke in high terms of the ability, kindness and indomitable energy of the Faculty; of their high-toned, honorable and ethical methods of conducting the school; of the deserved success and growing prospects of the Institution, and of the duty of the Southern profession and of Southern students to patronize the Southern Medical College. His farewell remarks to the class were touching, and his praise of Atlanta and her citizens invoked the hearty applause of the audience.

AWARD OF PRIZES.

After the valedictory the Dean presented the Faculty prize of $75.00 in gold for the highest proficiency at the final examination, in all the departments, which was awarded to Dr. B. F. Bradbury, of Maine.

The second prize of $25.00 in gold was awarded to Dr. John H. Young, of Virginia.

Honorable mention was made, in this connection, of Dr. Geo. C Spearman, of Georgia. The contest between these three was exceedingly close.

Prizes were then awarded by the several Professors for the best examinations in their several branches, as follows:

By Professor Nicolson—A case of instruments to Dr. B. F. Bradbury, for the best examination in Anatomy.

By Professor Hobbs—An oppthalmoscope to Dr. Geo. C. Spearman for the best examination in Diseases of the Eye, Ear and Throat.

By Professor Roy—drug case to Dr. Geo. C. Spearman for the best examination in Materia Medica.

By Professor Johnson—A case of Surgical Instruments to Dr. John H. Young for the best examination in the Theory and Practice of Surgery.

By Professor Bizzell—An apparatus for testing urine to Dr. John H. Young for the best examination in Chemistry.

By Professor Crawford—A gold medal to Dr. J. C. Beauchamp for the best examination in Clinical and Operative Surgery.

By Professor Owens—A drug case to Dr. Geo. C. Spearman for the best examination in the Principles and Practice of Medicine.

By Professor Word—A drug case to Dr. L. H. Cartledge for the best examination in Physiology.

By Professor Powell—A gold medal to Dr. John H. Young for the best examination in Obstetrics and Diseases of Women and Children.

Each Professor, on presenting his prize, made a short and appropriate address to the recipient, which added greatly to the interest and variety of the occasion.

The benediction, pronounced by the Rev. T. R. Kendall, concluded the programme.

The impression made by the exercises was highly favorable to the present standing and future growth and prospects of this new and rapidly rising Institution.

THE AMERICAN MEDICAL ASSOCIATION

Will assemble the present year at St. Paul, Minnesota, on the first Tuesday in June, next. A large representation is anticipated, especially from the South.

THE GEORGIA MEDICAL ASSOCIATION

Will meet the present year in Atlanta, on Wednesday, April 19. All necessary arrangements will be made for the proper reception of the Association by the local profession of the city. It is hoped there will be a full turn out from all sections of the State.

WM. R. WARNER'S POCKET DRUG CASE.—The beautiful red Morocco Drug Case presented by the Professor of Physiology as a premium for the best examination in that branch at the Southern Medical College Commencement, was from the House of Wm. R. Warner & Co., Manufacturing Druggists, Philadelphia. It was filled with *parvules*, kindly sent for that purpose, by that excellent House. These parvules have proven a great convenience to practitioners who have tried them, being reliable as to purity, neat and beautiful in appearance, and in such minute fractional portions that the dose may be graded to any desired quantity without the trouble of compounding. Armed with these beautiful sugar-coated parvules the practitioner need not fear offending the most fastidious stomach, and can compete with the homeopath in respect to neatness and attractiveness of his remedies. We have for some time been using these parvules, and have found them not only a great convenience, but safe, reliable and efficient in action.

DR. C. L. REDWINE—WHOLESALE AND RETAIL DRUGGIST.—This gentleman has resumed the drug business in Atlanta. His experience as a Druggist, his polite and accommodating manners, his kind and affable disposition, and his great energy, will soon bring to his house a large and active trade. He is just opening up a splendid establishment at 21 Marietta street. His stock is large and varied, and the interior arrangement of his store beautiful and attractive, evincing great skill and taste in the selection and display of his goods. See his advertisement in this Journal.

PATENT AND TRADE MARKS.—Attention is invited to the advertisement of Messrs. Parke, Davis & Co., in relation to the injury threatened public, professional and scientific interests by the abuse of the law relating to patents and trade marks. The advertisement will be found interesting and instructive. Messrs. Parke, Davis & Co. not only defend their house against assaults unjustly made, but define intelligibly what is meant by trade marks, and the true object and intent of the law relating to the same.

DR. SQUIBB is issuing a pamphlet entitled an "Ephemeris of Materia Medica, Pharmacy, Therapeutics and Collateral Information." We have the second number. Others are to be issued irregularly as may suit the author's convenience. Although gratuitously distributed, they contain matter of interest and instruction to the profession.

RECEIPTED.

1881.—Drs. M C Baldridge, L G Hardman, M P Dradwyler, J M Strong, G B Battle, T J Brasher, R D Lucius, John Riches, I F Dorroh, Cochran & Kirkpatrick.

1882.—Drs. J F Davis, S W Eaton, C H Jones, J W Baker, J B Meadlock, T J Jones, J M Covington, J O Sanders, Powell & Sills, A G Smythe, L S Brownlee, Tho A Cook, Louis Hadden, D B Hamilton, T S Parrham, J R Wilson, R E Hutchins, M J Luster, T E Morris, L B Sparkman, B F Duke, Jno H Pool, F C Davis, M E Demaret, C M Gibson. To Oct., 1882, Samuel Pool; to March, 1882, J M Earl; to March, 1883, W P Shelley; to October, 1882, I W Buddeke.

SPECIAL NOTICES.

THE art of sugar-coating pills so as not to impair their solubility, but to preserve the composition, keeping it soft and plastic, has acquired for **Messrs. Warner & Co.**, a world-wide reputation. Physicians may rely upon the purity of the drugs used, and upon the mathematical nicety in which their pills, "granules," and "parvules" are divided. Every doctor may be his own druggist, and at the same time save himself the drudgery of it by using WARNER'S preparations. A bottle of Quinine Pills recently sent us by this firm satisfies us that this form is fully maintaining its reputation.—*North Carolina Medical Journal, July*, 1879.

PARKE, DAVIS & CO.—This house stands among the very best in our country as Druggists and Manufacturing Chemists. Enterprising, active and energetic, their large and extensive business continues to increase, both at home and abroad. Their preparations of every kind are put up with great care and exquisite taste, and in respect to business character and reputation this house holds a very high and enviable position.

Listerine.—Dr. J. W. Singleton, the ex-president of S. W. Kentucky Medical Association, thus speaks of this valuable antiseptic in a late number of the Louisville *Medical News:* "I have used LISTERINE in several diseases in which carbolic acid and other antiseptics are commonly prescribed, and I must say, with great satisfaction. As an antiseptic alterative, internally administered, I consider it a very valuable therapeutic agent. In chronic ulceration of the nasal passages (catarrhal or otherwise), the listerinized solution, by injection, spray, or brush, is a most excellent remedy.

"In the suppurative stage of Burns and Scalds, I have had the most pleasant and happy effects to follow its use. I think LISTERINE well worthy of adoption by the profession generally as the remedy in all cases in which carbolized injections are usually ordered, for, in my humble opinion, it really has all the virtues of carbolic acid, with none of its poisonous evils and dangers."

Nervousness Resulting from Intemperance.—We have found **CELERINA** exceedingly valuable in the treatment of nervous headache, nervous exhaustion, nervousness resulting from intemperance. Men, and sometimes women, come to us trembling and apparently exhausted, all from the effects of intemperance. Such cases are approaching delirium tremens. CELERINA is the most appropriate prescription we can give them. A few doses of bromide of potassium may be given, alternated with the CELERINA, at first; but after this, for permanent effects, we depend upon the CELERINA.—*American Medical Journal.*

Buffalo Lithia Water.—These waters stand deservedly high, especially in urinary troubles. In Gravel, Rheumatic and Gouty affections, they are excellent; and in the various forms of indigestion, they are very efficient. In diseases of the excretory organs, especially in affections of the skin, they have been found very effectual. See advertisement in this Journal.

BEDFORD ALUM AND IRON SPRINGS.—The advertisement of these Springs may be seen in another part of this Journal, and should be carefully read. The Editors have tested its virtues. It is an excellent remedy in hæmoptisis, or as an anti hemorrhagic in any case, especially of a passive character. As an injection in gleet, gonorrhœa, leucorrhœa, etc., it is highly useful. As a gargle in ulcerated sore throat it is very efficacious. In chronic diarrhœa it is often useful, and given in small doses, in the night sweats of phthisis it has been found an excellent remedy.

More of **ELLIOTT'S** SADDLE BAGS are sold than all other patterns combined. One thousand have been shipped to different parts of the country since January 1st. The proprietor invites a thorough investigation and comparison of every Bag in the market. The U. S. Government did this in 1879, and adopted the ELLIOTT. octors that do the same thing get the standard article. Send for circular to A. A. DELLIER, 709 Washington Avenue, St. Louis, Mo.

JOHNSTON'S FLUID BEEF is an article that can be safely recommended as a concentrated natural agent. We have tried it in low states of the system and found it an admirable article. In the diarrhœas of infants, wherein the child is taken from the breast, and is dying of inanition, a little of this fluid beef has been known to support the child and save life. Try it.

HYDROLEINE.—The advertisement of this valuable preparation may be found in this Journal. As a substitute for Cod-Liver Oil in lung affections it is likely to have a fine run. The formula is published upon the labels, and will at once impress any practitioner in its favor, as well adapted to consumption and other wasting diseases.